**Lab 02 (OP Exercise)**

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1. *Create* a new project. *Type* in the following program. Add a comment at the top to include your name and the date.
2. *Compile* and *Run* with different values. What data values should you choose? Think about what we discussed in class.
3. Add code to compute the modulus. *Hint:* you will also have to declare a new variable*.*

**//this program demonstrates the use of various operators**

**#include <iostream >**

**using namespace std;**

**int main()**

**{**

**int num1;**

 **int num2;**

**int sum;**

 **int diff;**

 **int prod;**

**float quot;**

**cout << "Enter two integer values" << endl;**

**cin >> num1 >> num2;**

**sum = num1 + num2;**

**cout << num1 << " + " << num2 << " is " << sum << endl;**

**diff = num1 - num2;**

**cout << num1 << " - " << num2 << " is " << diff << endl;**

**prod = num1 \* num2;**

**cout << num1 << " \* " << num2 << " is " << prod << endl;**

 **quot = (float) num1 / num2;**

**cout << num1 << " / " << num2 << " is " << quot << endl;**

 **return 0;**

**}**

1. Answer the following questions:
2. What data values should you choose to test the program? Think about what we discussed in class.
3. What happens when num2 is 0? Why?
4. What does this tell you about using division or modulus in your programs?
5. *Add* the following lines to correct the divide by zero problem. Compile and run with different values to ensure it works correctly.

     if (num2 == 0)

{

 cout << “cannot divide by zero!” << endl;

}

else

{

 …

}

1. *Submit* *program, output and questions as one .doc file* on Blackboard.